

Worcester Polytechnic Institute Digital WPI

Interactive Qualifying Projects (All Years)

Interactive Qualifying Projects

October 2010

BLACKSTONE VALLEY DATA COLLECTION AND ANALYSIS

Michael Edward Ducey
Worcester Polytechnic Institute

Sean Michael Burke
Worcester Polytechnic Institute

Sindi Silaj
Worcester Polytechnic Institute

Follow this and additional works at: <https://digitalcommons.wpi.edu/iqp-all>

Repository Citation

Ducey, M. E., Burke, S. M., & Silaj, S. (2010). *BLACKSTONE VALLEY DATA COLLECTION AND ANALYSIS*. Retrieved from <https://digitalcommons.wpi.edu/iqp-all/35>

This Unrestricted is brought to you for free and open access by the Interactive Qualifying Projects at Digital WPI. It has been accepted for inclusion in Interactive Qualifying Projects (All Years) by an authorized administrator of Digital WPI. For more information, please contact digitalwpi@wpi.edu.

BLACKSTONE VALLEY DATA COLLECTION AND ANALYSIS

An Interactive Qualifying Project Report:

submitted to the faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

in partial fulfillment of the requirements for the

Degree of Bachelor of Science

By

Sean Burke

Michael Ducey

Sindi Silaj

Date: October 14, 2010

Approved:

Prof. Ryan Baker

Abstract

A major challenge among the school districts in the Blackstone Valley area is servicing youth who have not explored or shown interest in a career or job. The goals of this project were to determine whether there is demand for a higher education option in the region, and what form this higher education option should take in terms of courses and design of facility. Surveys were developed and analyzed to collect the necessary information to attain a decision. The Blackstone Valley Education Foundation recognized the problem, and working with Quinsigamond Community College, has been working on developing a satellite branch of the college in the Blackstone Valley area to make it more convenient for the residents to attend classes of higher education.

Acknowledgements

We would like to thank our advisor, Professor Ryan Baker, for his guidance, patience, and understanding throughout the course of this project.

We would like to thank Susan Gately and Jeannie Hebert from the Blackstone Valley Chamber of Commerce for their assistance in communicating with the towns and schools within the Blackstone Valley Region.

We would like to thank all the Principals, guidance counselors and students who contributed to our research and took their time to fill out the surveys.

Contents

Abstract	i
Introduction	1
Research Methods	2
Data Analysis.....	4
Blackstone-Millville Regional High School	4
Blackstone Valley Technical Vocational High School	6
Douglas High School.....	8
Grafton High School	10
Hopedale High School	12
Milford High School	14
Millbury High School	16
Nipmuc Regional Jr/Sr High School.....	18
Sutton High School.....	20
Uxbridge High School	22
High Schools Total.....	24
Business Employers.....	26
Adult Population	28
Future Work.....	30
Conclusion.....	31
Appendix A: Surveys	33
Student Survey.....	33
Guidance Counselor Survey	37
Business and Industry Survey	39
Adult Population Survey	42

Introduction

A major challenge among the school districts in the Blackstone Valley area is servicing youth who do not pass MCAS, marginally pass MCAS, are not prepared for college, or have not shown an interest in a career/job. The Blackstone Valley area includes the towns of Mendon, Upton, Grafton, Sutton, Blackstone, Millville, Uxbridge, Northbridge, Milford, Douglas, Hopedale, and Millbury. The goal of the project is to gather information to find out if there is demand for a higher education option in the region, and what form that higher education option should take in terms of courses and design of facility.

The Blackstone Valley Education Foundation reached out to WPI students to help them research and gather information that will aid in determining college and continuing education goals of the students, adult population and business employers in the future. Although we were not working directly with Quinsigamond Community College, they were interested in the results of our project because they plan to utilize our data to see if a satellite campus in the area would be a good investment as an expansion of their school.

In order to collect the data, we developed a series of surveys for four different target demographics. Separating the demographics into four groups was necessary in order to present the data accurately. The four demographics included adults, business employers, high school seniors, and guidance counselors within the Blackstone Valley region. They were all surveyed in an attempt to find an overlap in interest for a higher education facility in the area.

Research Methods

As a means of data collection, surveys were developed for the scope of the research, which includes four demographics: students, guidance counselors, adults and business employers. The surveys were developed and analyzed to collect the necessary information to attain a decision. The reason for administering the surveys to each group separately is that all four demographics have potential interest in higher education, but in each group there is a different motivation for that higher education.

Our interest was to evaluate the need for a higher education option, and to see the interest in specific courses and the design of the facility. Based on our goals, we developed questions best suited to each target population.

For the students, we were interested in their future education plans after graduation from high school. Basic questions such as whether a student will attend college full time versus part time and whether a student will live at school or commute were taken from previous surveys, provided by the Chamber, since they are very common questions in this type of research. One thing that was removed from previous surveys was asking for the student's name. Names were not important for our research, only the schools which they attended were. In order to make the surveys more specific to our research, we added questions asking if they would attend an accredited college in the area as well as if they planned on using any form of financial aid if offered, etc.

The purpose of the guidance counselor surveys was to compare their responses with those of their students. To create the surveys for the counselors, many of the questions were based off questions from the student survey. However, we changed the structure of the survey to ask for facts, rather than asking for the opinions and desires of students. In addition to altering the questions, we added a question about the size of the graduating class as well as their opinion in the need for English as a Second Language courses.

As for the adult population, we researched the interest in going back to school and for what courses. No previous surveys for this particular demographic were provided for us; therefore, all questions were constructed by us. A few of the questions were based on ones from our student surveys because they were common questions that applied to the adult audience as well.

Lastly, the business surveys' goal was to find out the employers interest in their employees taking classes for training or for various other reasons. Again, certain questions from the adult survey applied to business employers as well. To construct the rest of the survey, we utilized multiples resources provided for us in order to extract the questions that were most important to our research. We changed the structure of those questions to fit the type of information we were looking for.

In order to reach out to the students and guidance counselors, we approached all the schools through phone and e-mail. A few days after the initial communication, we visited each school to drop off the surveys. We spoke to the principals for approval, and then handed out the surveys to students and counselors personally. Collection of the surveys was also done in the same manner, approximately one week after the drop off.

The initial plan for the business and industry surveys was to distribute them through an e-mail list provided by resources at the Chamber of Commerce. However, we created an online version of the survey because the email list turned out to be unavailable. The surveys were presented to the business employers as a link posted online at the Chamber of Commerce's website, some school websites, and some town websites. This link was posted alongside the adult survey which was posted online as well.

Data Analysis

Blackstone-Millville Regional High School

A total of 61 seniors took the survey. 93.44% of those students planned to attend college after graduation from high school. The guidance counselors disagree with this consensus. The guidance counselors think that approximately 80% of the students will be going to college after high school. 79.63% of those who responded to this question plan to go full time, but 5.26% of the students who plan to attend college did not respond to this question. 80.70% of the students plan to attend day classes, 3.51% said they would attend evening classes, and 15.79% were unsure at this time.

78.95% of students plan to attend a 4-year college, however the guidance counselor survey suggests only 41-60% of the students would attend a 4-year college. 7.02% plan to go to a 2-year college and transfer, whom the guidance counselors would disagree with; stating that around 20% will go to a 2-year school to transfer later. 7.02% plan to go to a 2-year college for a degree of certificate, yet the counselors suggest that it should be around 21-40%. Also, 7.02% of the students plan to attend a trade/vocational school, confirmed by the counselors.

Of the students who responded, 66.67% plan to live at school, while 33.33% plan to commute. All students, except 1.75% (one person) plan to attend college within the United States. 59.65% plan to stay within New England. 22.81% would stay only within Massachusetts. 21.05% want to go outside New England. Lastly, 10.53% want to stay within Worcester County. According to the guidance counselors, most of the students plan to stay within Worcester County, and very few would venture outside of New England.

In Table 1, the popularity of multiple areas of study is shown. The guidance counselor assessment of student interest in areas of study was slightly accurate. Health careers and business were on the higher side of what the counselors thought were popular majors, but the counselors thought that education would be the most popular major choice.

If a reasonably priced, accredited school was opened within 20-30 min of the students, 78.95% of the students would consider attending, but 1.75% gave no response. In Table 2, the factors that would influence a student's decision to attend said

Table 1	
Health Careers	29.82%
Other	19.30%
Business	10.53%
Art	8.77%
Engineering	8.77%
Environmental	8.77%
Criminal Justice	7.02%
Liberal Art	7.02%
Not Certain	7.02%
Computers/IT	5.26%
Education	3.51%
Tech/Auto/Mech	3.51%
Hospitality	1.75%
Human Service	1.75%
Manufacturing	1.75%

Table 2	
Courses	64.44%
Transportation	42.22%
Close to Job	26.67%
Prospect of Employment	11.11%
Other	11.11%
Parking	8.89%
Family issues	6.67%

school are listed and their responses are recorded. 15.79% of students plan to attend a school in which they would not need financial aid or scholarships, but 14.04% did not respond.

Based on a scale of 1-6, students were asked to indicate the most important factors when choosing a college. Among the students, the highest rated factors include academic reputation, choice of majors, campus facilities, cost to attend, and the location of the campus. The counselors were given fewer options, but their top two choices for what they thought students took into account were choice of majors and cost to attend. The students and counselors seem to generally agree on what is important when choosing a college. Table 3 shows the mean concerns of students when making a decision about a college, including the standard deviation of the surveyed information.

Table 3		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Majors	5.22	1.14
Academic Reputation	4.46	1.28
Cost	4.27	1.53
Location	4.12	1.41
Campus Facilities	4.00	1.66
Residence Halls	3.54	1.61
Commuting distance	3.35	1.90
Extra-curricular	3.26	1.60
Sports/Athletics	3.08	1.76
Friends/Family	1.82	1.29

Table 3 also coordinates with what types of schools students would like to attend, when asked to list their top three schools. The majority of students would like to attend a state school, many of which have wide varieties of majors for students to choose from and the number one factor for choosing a college is the choice of majors. One of the next highest influences is cost of attendance agreeing with the fact that 24.46% of student said that they would

like to attend a local state school. The most popular type of school was a nationally ranked private school, indicating that campus facilities and academic reputation were some of the most important factors.

The guidance counselors seem to know what the students plan to do after high school and may have a better idea than what the surveys have told us. The counselors have based their statistics on the entire senior class, but the surveys only encompass 61 students out of approximately 140 that are in the graduating class, so there will be some disagreement with the surveys and the facts that are given to us by the guidance counselors. Counselors have also informed us on the survey that throughout the entire student body, that there 1-5% of the students that would benefit from ESL classes.

Blackstone Valley Technical Vocational High School

A total of 120 seniors took the survey. 85.04% of those students planned to attend college after graduation from high school. The guidance counselors disagree though, they think that approximately 51-75% of the students will be going to college after high school. 78.30% of those who responded to this question plan to go full time, but 1.85% of the students who plan to attend college did not respond to this question. 62.96% of the students plan to attend day classes, 1.85% said they would attend evening classes, and 30.56% were unsure at this time.

Amongst the college-bound students, 69.44% plan to attend a 4-year college, however the guidance counselor survey suggests only 41-60% of the students would attend a 4-year college. 12.04% plan to go to a 2-year college and transfer, whom the guidance counselors would disagree with, due to the fact that they believe 21-40% will transfer from a 2-year school. 13.89% plan to go to a 2-year college for a degree of certificate, yet the counselors suggest that it should be around 41-60%. Also, 16.67% of the students plan to attend a trade/vocational school, which the counselors suggest that it should be 21-40%.

Of the students who responded, 55.77% plan to live at school, while 3.70% did not respond. All students plan to attend college within the United States. 46.30% plan to stay within New England. 34.26% would stay only within Massachusetts. 11.11% want to go outside New England. Lastly, 9.26% want to stay within Worcester County. The guidance counselors have mentioned that most of the students plan to stay within Worcester County, and very few would attend class outside of New England.

In Table 4, the popularity of multiple major fields is shown. The guidance counselor assessment of student interest in areas of study was mostly correct. Health careers, business, and engineering were on the high popularity side based on the guidance counselor's survey, but the counselors thought that hospitality/management would be the one of the most popular major choices.

Table 4	
Engineering	24.07%
Other	23.15%
Business	16.67%
Health Careers	16.67%
Art	12.96%
Tech/Auto/Mech	12.96%
Education	12.04%
Computers/IT	7.41%
Criminal Justice	7.41%
Hospitality	3.70%
Liberal Art	3.70%
Environmental	2.78%
Human Service	1.85%
Not Certain	1.85%
Manufacturing	0.93%

Table 5	
Courses	72.84%
Transportation	58.02%
Close to Job	41.98%
Parking	29.63%
Prospect of Employment	20.99%
Family issues	16.05%
Other	4.94%

If a reasonably priced, accredited school was opened within 20-30 min of the students, 82.65% of the students would consider attending, but 9.26% gave no response. In Table 5, the factors that would influence a student's decision to attend prior mentioned school are listed and their responses are recorded. 25.26% of students plan to attend a school in which they would not need financial aid or scholarships, but 12.04% did not respond.

On a scale of 1-6, students were asked to indicate the most important factors when choosing a college. Among the students, the highest rated factors included choice of majors, cost to attend, academic reputation, and location. The counselors were given fewer options, but their top two choices for what they thought students took into account were cost to attend and location. Below, Table 6 shows the mean concerns of students when making a decision about a college, including the standard deviation of the surveyed information.

When asked to list their top three schools, the students' choices coordinate with Table 6. The majority of students would like to attend a local state school, many of which have wide varieties of majors for students to choose from and the number one factor for choosing a college is the choice of majors. Local state schools are normally on the cheaper end for attendance, which would also explain why cost is the second highest influence. 25.00% of the schools given were community colleges and technical/vocational schools, which agrees with the choice of majors being the top influence; assuming that students want to follow their trade from high school to higher education.

Table 6		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Majors	5.46	0.88
Cost	4.78	1.31
Academic Reputation	4.31	1.21
Commuting distance	4.29	1.47
Location	4.24	1.37
Campus Facilities	4.22	1.10
Residence Halls	3.72	1.40
Extra-curricular	3.52	1.43
Sports/Athletics	3.13	1.80
Friends/Family	2.70	1.41

The guidance counselors tend to agree with what the students plan to do after high school. Counselors have also informed us that throughout the entire student body, that there 1-5% of the students that would benefit from ESL classes.

Douglas High School

A total of 87 seniors took the survey. 95.40% of those students planned to attend college after graduation from high school. The guidance counselors agree that a very high number of students will attend college after high school. 93.98% said they plan to go full time. 86.75% of the students plan to attend day classes, only 1.20% said they wanted to attend evening/weekend course, and 12.05% said they were unsure at this time.

Amongst the college-bound students, 87.95% plan to attend a 4-year college. However, guidance counselors stated that they believe only 41-60% would attend a 4-year school. Only a total of 8.43% of students said they would attend a 2-year college, whether it is to transfer or get some sort of degree. Also, 2.41% of students said they would attend a Technical/Vocational School. The guidance counselor results differ from the student responses slightly. The counselors believe that 21-40% of the students would go to a 2-year college only, and approximately 1-20% would attend a 2-year to transfer.

Students were also asked what they thought their living arrangements might be for college. 78.31% plan to live at school, while the rest plan to commute from home. All these students plan to stay in the confines of the United States. 39.76% plan to go somewhere in New England, and 33.73% would stay only within Massachusetts. 15.66% want to go outside New England. And only 9.64% want to stay within Worcester County. The guidance counselors' opinions are close, but slightly off. The counselors believed the highest percentage of students would stay within Mass, when in reality it was the 2nd highest. Also, they believed the smallest percentage would go outside New England, yet the smallest group was actually the ones who wanted to stay in Worcester County.

Table7	
Health Careers	24.10%
I'm not certain	19.28%
Business	18.07%
Education	12.05%
Engineering	12.05%
Liberal Arts	10.84%
Criminal Justice/Law	9.64%
Other	8.43%
Arts	6.02%
Computers/IT	6.02%
Restaurant Management	2.41%
Human Services	2.41%
Manufacturing	2.41%
Technical/Automotive...etc	2.41%
Environmental Studies	0.00%

In Table 7, the popularity of multiple major fields is shown. The guidance counselor assessment of student interest in areas of study was somewhat correct. The counselors thought health careers would be highly ranked, but not as high as it was. Also, Business was expected to be highly ranked while Engineering and Education were expected to be near the top.

If a reasonably priced, accredited school was opened within 20-30 min of the students, 62.65% of the students would consider attending. In Table 8, the factors that would influence a student's decision to attend the aforementioned school are listed and their responses are

recorded. 70.73% of students plan to attend a school in which they would need financial aid or scholarships, and only 1.22% of the students who filled out the survey did not respond to this question.

On a scale of 1-6, students were asked to indicate the most important factors when choosing a college. Among the students, the highest rated factors included choice of majors, cost to attend, campus facilities, and academic reputation. The counselors were given fewer options, but their top two choices for what they thought students took into account match exactly what the students answered. Below, Table 9 shows the mean concerns of students when making a decision about a college, including the standard deviation of the surveyed information.

Table 8	
Courses	61.54%
Transportation	55.77%
Close to my job	28.85%
Family Issues	26.92%
Parking Availability	21.15%
Prospect of Employment	13.46%
Other	7.69%

Table 9		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Choice of majors	5.22	1.06
Cost to attend	4.49	1.40
Campus Facilities	4.39	1.12
Academic Reputation	4.29	1.10
Location of campus	4.28	1.20
Residence Halls	3.77	1.42
Extra-curricular	3.61	1.33
Commuting distance	3.42	1.67
Sports/Athletics	3.14	1.68
Friends/Family attending	2.25	1.57

When asked to list their top three schools, local private colleges ranked first with 29.22% of the schools listed. National state and local state schools both tied at 21.92% of the schools listed. Also, 5.02% of the schools listed were Community Colleges. These results reiterate the fact that students consider cost to be a major factor when choosing a school. Also, with the split between national and local state schools, students also consider academic reputation, as well as the location of the campus.

The guidance counselors tend to agree with what the students plan to do after high school. Sometimes they were slightly off but the results between the two parties were consistently similar. Counselors have also informed us that throughout the entire student body, that there 1-5% of the students that would benefit from ESL classes.

Grafton High School

A total of 112 seniors took the survey. 98.21% of those students planned to attend college after graduation from high school. The guidance counselors agree that a very high number of students will attend college after high school. 93.64% said they plan to go full time. 77.27% of the students plan to attend day classes, 21.82% said they were unsure at this time, and only one person said they would take evening/online courses.

Amongst the college-bound students, 90.91% plan to attend a 4-year college. Guidance counselors disagree slightly with this because they stated that they believe 61-80% of their students would attend a 4-year school. 7.27% of students said they would attend a 2-year school then transfer, and only one person said they would attend a 2-year college for a degree. Also, one student said they would attend a Technical/Vocational School. The guidance counselors opinions differ from the students because they believe 21-40% of students would attend a 2-year college for a degree, and they believe 0% would attend a 2-year college to transfer.

Students were also asked what they thought their living arrangements might be for college. 83.64% plan to live at school, while the rest plan to commute from home. Only one person did not respond to this question. All but three of these students plan to stay in the confines of the United States. These students wish to attend college in Canada. Otherwise, 50.00% plan to go somewhere in New England, and 28.18% would stay only within Massachusetts. 16.36% want to go outside New England. Lastly, only 2.73% want to stay within Worcester County. The guidance counselors' opinions are close but slightly off. The counselors believed the highest percentage of students would stay within Mass, when in reality it was the 2nd highest. Also, they believed the smallest percentage would go outside New England, yet the smallest group was actually the ones who wanted to stay in Worcester County.

Table 10	
Health Careers	26.36%
Arts	17.27%
Business	17.27%
Liberal Arts	17.27%
Education	11.82%
I'm not certain	10.00%
Criminal Justice/Law	9.09%
Other	9.09%
Engineering	6.36%
Computers/IT	5.45%
Human Services	2.73%
Manufacturing	1.82%
Restaurant Management	0.91%
Environmental Studies	0.00%
Technical/Automotive...etc	0.00%

In Table 10, the popularity of multiple major fields is shown. The guidance counselor assessment of student interest in areas of study was spot on. Health careers, Business, Liberal Arts, and Education were all predicted by counselors to be at the top.

If a reasonably priced, accredited school was opened within 20-30 min of the students, 71.82% of the students would consider attending. In Table 11, the factors that would influence a student's decision to attend the aforementioned school are listed and their responses are

recorded. 66.02% of students plan to attend a school in which they would need financial aid or scholarships, and 6.36% of the students who filled out the survey did not respond to this question.

On a scale of 1-6, students were asked to indicate the most important factors when choosing a college. Among the students, the highest rated factors included choice of majors, location of campus, campus facilities, and academic reputation. The counselors were given fewer options, but their top choice for what they thought students took into account matched what the students answered. However, their second highest rated factor was cost to attend. According to students, that ranks 5th overall. Below, Table 12 shows the mean concerns of students when making a decision about a college, including the standard deviation of the surveyed information. Some of the other factors students mentioned included student atmosphere and study abroad programs.

When asked to list their top three schools, local private colleges ranked first with 30.41% of the schools listed. National state schools followed up with 22.30%. Also, 19.59% of schools listed were local state schools and 17.57% were national private. 4.05% of the schools listed were Community Colleges. These results reiterate the fact that campus facilities are high on the list for students' considerations when choosing a school. Also, with national state schools being so close in second, academic reputation is shown to be a large consideration as well.

Overall, the guidance counselors agree with the concerns for students but disagree with the amount of students going to college. Counselors have also informed us that throughout the entire student body, that there 1-5% of the students that would benefit from ESL classes.

Table 11	
Courses	65.82%
Transportation	48.10%
Close to my job	26.58%
Family Issues	17.72%
Prospect of Employment	17.72%
Parking Availability	8.86%
Other	5.06%

Table 12		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Choice of majors	5.24	0.98
Academic Reputation	4.52	1.22
Location of campus	4.48	1.18
Campus Facilities	4.46	1.29
Cost to attend	4.39	1.41
Residence Halls	4.21	1.19
Extra-curricular	3.65	1.34
Commuting distance	3.53	1.67
Sports/Athletics	3.11	1.58
Friends/Family attending	2.36	1.39

Hopedale High School

A total of 67 seniors took the survey. 98.51% of those students planned to attend college after graduation from high school. According to the guidance counselor survey, this number is accurate. 89.39% of those students plan to go full time, the rest part-time. 78.46% of those who responded to this question plan to attend day classes, 6.15% said they would attend evening classes, and 15.38% were unsure at this time. Only 1.52% of the students planning to attend college did not respond.

81.82% of students plan to attend a 4-year college. 31.64% plan to go to a 2-year college and transfer, while 1.58% plan to go to a 2-year college for a degree of certificate. Also, 3.03% of the students plan to attend a trade/vocational school. According to the guidance counselors, the number of students that would attend a 2-year college to transfer should be around 1-20%. That is lower than 31.64%, which could be because they expect more than 1.58% of the students to go to a two-year college for a degree or certificate. The rest of the guidance counselors' responses correspond with those of the students.

Of the students who responded, 81.25% plan to live at school, while 18.75% plan to commute. 3.03% of students did not respond to this question. All students plan to attend college within the United States. 51.52% plan to stay within New England. 25.76% would stay only within Massachusetts. 18.18% want to go outside New England. Lastly, 9.09% want to stay within Worcester County. According to the guidance counselors, most of the students plan to stay within Massachusetts, and very few would venture outside of New England. In Table 13, the popularity of multiple areas of study is shown. The guidance counselor assessment of student interest areas of study was mostly accurate. Engineering was an exception; the guidance counselors didn't assess it as a very popular major.

Table 13	
Health Careers	19.70%
Business	16.67%
Engineering	16.67%
Arts	15.15%
Criminal Justice	12.12%
Education	12.12%
Computers/IT	7.58%
Environmental Sciences	7.58%
Not certain	7.58%
Hospitality	4.55%
Liberal Arts	3.03%
Tech/Auto/Mech	1.52%
Human Services	0.00%
Manufacturing	0.00%

If a reasonably priced, accredited school was opened within 20-30 min of the students, 63.93% of the students would consider attending, but 7.58% gave no response. According to guidance counselors, only 1-5% of students would benefit from some type of ESL classes.

Students were asked to rate from 1 to 6 multiple factors that would influence their decision to attend a college. The mean and standard deviation for each factor is shown in Table 14. According to it, the choice of majors is the most important factor in making a decision. The least important factor is whether friends or family are attending. The counselors were given fewer options, but their top two choices for what they thought students took into account were

Table 14		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Choice of majors	5.36	2.5
Cost to attend	4.67	1.94
Campus Facilities	4.6	1.69
Academic Reputation	4.57	1.53
Location of campus	4.49	1.74
Commuting distance	4.24	2.6
Residence Halls	4.23	1.7
Extra-curricular	3.86	1.71
Sports/Athletics	3.8	2.1
Friends/Family attending	3.49	2.4

4.55% want to attend a vocational/trade school.

Due to a misprint, the last two questions of the surveys were not completed by the Hopedale High School students. They asked for information regarding factors that would influence their decision to choose a campus close to home and whether they plan to attend a college without financial aid.

choice of majors and athletics. They thought that location was the least important factor when selecting a school. Both the students and counselors seem to agree on the choice of majors, but the location of the schools seems to be a more important factor than they assumed. 66.67 % of the students would like to attend a local state school, while 65.16% would like to go to a nationally recognized private college. 13.64% are considering community college, while

Milford High School

A total of 148 seniors took the survey. 95.27% of those students planned to attend college after graduation from high school. 88.57% of those who responded to this question plan to go full time, but 0.71% did not respond. 75% of the students who plan to attend college plan to attend day classes and 0.71% plan to attend evening or weekend classes. 24.29% were unsure at this time, but 0.71% did respond.

89.93% of the students who responded to this question, plan to attend a 4-year college. 4.32% plan to go to a 2-year college and transfer, while 2.88% plan to attend a 2-year college for degree. 2.88% plan to attend a trade or vocational school, but 1.42% of the students did not respond.

Of the students who responded, 75.54% plan to live at school, while 24.46% plan to commute. 1.42% of students did not respond to this question. Two students plan to attend college outside the United States. 43.26% plan to stay within New England. 34.04% would stay only within Massachusetts. 19.86% want to go outside New England. Lastly, 1.42% want to stay within Worcester County. In Table 15, the popularity of multiple areas of study is shown.

Table 15	
Health Careers	22.70%
Business	15.60%
Criminal Justice	15.60%
Arts	12.77%
Engineering	11.35%
Liberal Arts	10.64%
Education	7.09%
Not certain	7.09%
Computer/IT	6.38%
Environmental	3.55%
Tech/Auto/Mech	3.55%
Human Services	1.42%
Manufacturing	0.71%
Hospitality	0.00%

If a reasonably priced, accredited school was opened within 20-30 min of the students, 68.79% of the students would consider attending, but 2.84% gave no response. In Table 16, the factors that would influence a student's decision to attend the aforementioned school are listed and their responses are recorded.

Table 16	
Courses	39.72%
Transportation	34.75%
Close to my job	19.15%
Prospect of employment	17.02%
Family issues	12.06%
Parking availability	11.35%

Students were asked to rate from 1 to 6 multiple factors that would influence their decision to attend a college. The mean and standard deviation for each factor is shown in Table 17. According to it, the choice of majors is the most important factor in making a decision. The least important factor is whether friends or family are attending.

The majority of students would like to attend a local state school, at 62.41% of the students. Also, 61.70% of the students would attend a national state school. 53.90% of the students would like to attend a nationally recognized private college, or a local private college. 10.64% of the students would attend a community college, while 4.96% would like to go to a trade/vocational school.

Table 17		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Choice of majors	5.29	2.53
Academic Reputation	4.67	1.65
Campus Facilities	4.61	1.7
Location of campus	4.51	1.85
Cost to attend	4.45	1.78
Residence Halls	3.95	1.63
Extra-curricular	3.6	1.69
Commuting distance	3.29	1.75
Sports/Athletics	2.97	1.72
Friends/Family attending	2.81	1.77

Note: Guidance counselors did not provide responses for surveys, so comparisons are not included for this school.

Millbury High School

A total of 143 seniors took the survey. 95.80% of those students planned to attend college after graduation from high school. According to the guidance counselor survey, this number is accurate. 85.93% of those who responded to this question plan to go full time, but 1.46% of the students who plan to attend college did not respond to this question. 75.18% of those who plan to attend college plan to attend day classes, 31.39% said they would attend evening classes, and 21.17% were unsure at this time.

83.94% of students plan to attend a 4-year college, however the guidance counselor survey suggests only 41-60% of the students would attend a 4-year college. 7.30% plan to go to a 2-year college and transfer, which the guidance counselors would agree with. 5.84% plan to go to a 2-year college for a degree of certificate, yet the counselors suggest that it should be around 21-40%. Also, 5.84% of the students plan to attend a trade/vocational school, again confirmed by the counselors.

Of the students who responded, 71.97% plan to live at school, while 28.03% plan to commute. 3.65% of students did not respond to this question. All students plan to attend college within the United States. 51.09% plan to stay within New England. 25.55% would stay only within Massachusetts. 24.09% want to go outside New England. Lastly, 7.30% want to stay within Worcester County. According to the guidance counselors, most of the students plan to stay within Worcester County, and very few would venture outside of New England.

In Table 18, the popularity of multiple areas of study is shown. The guidance counselor assessment of student interest in areas of study was very accurate due to the fact that both parties agree on the top four favorite fields of study.

Table 18	
Health Careers	25.55%
Business	16.06%
Criminal Justice	16.06%
Engineering	14.60%
Education	10.22%
Computers/IT	8.76%
Liberal Art	8.03%
Not Certain	8.03%
Other	8.03%
Art	7.30%
Tech/Auto/Mech	5.84%
Environmental	4.38%
Hospitality	2.92%
Human Service	2.19%
Manufacturing	0.73%

If a reasonably priced, accredited school was opened within 20-30 min of the students, 78.79% of the students would consider attending, but 3.65% gave no response. In Table 19, the factors that would influence a student's decision to attend the aforementioned school are listed and their responses are recorded. 35.77% of students plan to attend a school in which they would not need financial aid or scholarships, but 10.22% did not respond.

Table 19	
Courses	69.23%
Transportation	54.81%
Family issues	27.88%
Close to Job	24.04%
Parking	24.04%
Prospect of Employment	16.35%
Other	5.77%

Students were asked to indicate the most important factors when choosing a college, based on a 1-6 scale. The students rated choice of majors, cost to attend, academic reputation,

and campus facilities. The counselors had fewer options, but their top two choices for what they thought students took into account were cost to attend and choice of majors. Table 20 shows the mean concerns of students when making a decision about a college, including the standard deviation of the surveyed information.

When asked to list their top three schools, the students' choices coordinate with Table 20. The majority of students would like to attend a local state school, many of which have wide varieties of majors for students to choose from and the number one factor for choosing a college is the choice of majors. 23.19% of students want to attend a national state school and 22.90% want a national private school. This large amount of people may be the reason for academic reputation being so high. Many of the nationally ranked schools/NCAA sports team would be in this category boosting the reputation of these schools. Local state schools are normally on the cheaper end for attendance, which would explain why cost is the second highest influence.

Table 20		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Majors	5.17	0.95
Cost	4.60	1.33
Academic Reputation	4.55	1.11
Campus Facilities	4.51	1.12
Location	4.40	1.21
Residence Halls	4.01	1.34
Commuting distance	3.55	1.69
Extra-curricular	3.52	1.25
Sports/Athletics	3.06	1.63
Friends/Family	2.74	1.55

The guidance counselors are in agreement with most of what the students plan to do after high school. Counselors have also informed us that throughout the entire student body, that there 1-5% of the students that would benefit from ESL classes.

Nipmuc Regional Jr/Sr High School

A total of 108 seniors took the survey. 100.00% of those students planned to attend college after graduation from high school. Although the number may not actually be 100%, the guidance counselors agree that a very high number of students will attend college after high school. 97.22% said they plan to go full time. 80.56% of the students plan to attend day classes, while 19.44% said they were unsure at this time.

Amongst the college-bound students, 91.67% plan to attend a 4-year college. Guidance counselors seem to agree with this because they stated that they believe 81-100% of their students would attend a 4-year school. Only 4.63% of students said they would attend a 2-year college to transfer, and no students intend to go to a 2-year college for a degree. Also, 19.44% of students said they would attend a Technical/Vocational School. The guidance counselors seem to agree with these numbers because they said only 1-20% of students would fit in each of the previous categories.

Students were also asked what they thought their living arrangements might be for college. 92.59% plan to live at school, while the rest plan to commute from home. All these students but one plan to stay in the confines of the United States. That lone student wants to go to school in Canada. Otherwise, 55.56% plan to go somewhere in New England, and 24.07% would stay only within Massachusetts. 17.59% want to go outside New England. Lastly, only 1.85% wants to stay within Worcester County. The guidance counselors' opinions are close but slightly off. The counselors believed the highest percentage of students would stay within Mass, when in reality it was the 2nd highest. Also, they believed the smallest percentage would go outside New England, yet the smallest group was actually the ones who wanted to stay in Worcester County.

Table 21	
Business	27.78%
Health Careers	21.30%
I'm not certain	18.52%
Other	15.74%
Liberal Arts	13.89%
Arts	12.96%
Engineering	12.04%
Education	11.11%
Criminal Justice/Law	5.56%
Computers/IT	3.70%
Environmental Studies	2.78%
Restaurant Management	2.78%
Human Services	2.78%
Technical/Automotive...etc	2.78%
Manufacturing	1.85%

In Table 21, the popularity of multiple major fields is shown. The guidance counselor assessment of student interest in areas of study was somewhat correct. Business was the top for both parties, but the counselors thought Engineering would be more popular than what the students actually answered. Also, the counselors expected for Criminal Justice and Education to be middle-of-the-road for the students.

If a reasonably priced, accredited school was opened within 20-30 min of the students, 59.26% of the students would consider attending. In Table 22, the factors that would influence a student's decision to attend the aforementioned school are listed and their responses are recorded. 64.95% of students plan to attend a school in which they would need financial aid or scholarships, and 10.19% of the students who filled out the survey did not respond to this question.

Table 22	
Courses	70.31%
Transportation	56.25%
Parking Availability	23.44%
Prospect of Employment	21.88%
Family Issues	20.31%
Close to my job	15.63%
Other	7.81%

On a scale of 1-6, students were asked to indicate the most important factors when choosing a college. Among the students, the highest rated factors included choice of majors, cost to attend, campus facilities, and academic reputation. The counselors were given fewer options, but their top two choices for what they thought students took into account match what the students answered. Below, Table 23 shows the mean concerns of students when making a decision about a college, including the standard deviation of the surveyed information. Some of the other factors students mentioned included food options and cleanliness.

When asked to list their top three schools, national state colleges ranked first with 29.27% of the schools listed. Local private and local state schools followed up with 28.22% and 18.47, respectively. Also, only 1.05% of the schools listed were Community Colleges. These results reiterate the fact that students consider academic reputation to be a major factor when choosing a school. Also, with local private schools being so close in second, campus facilities is shown to be a large consideration as well.

Table 23		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Choice of majors	5.27	0.89
Academic Reputation	4.83	0.96
Campus Facilities	4.72	0.91
Cost to attend	4.57	1.16
Location of campus	4.45	1.11
Residence Halls	4.16	1.23
Extra-curricular	3.67	1.36
Sports/Athletics	3.06	1.68
Commuting distance	2.83	1.57
Friends/Family attending	2.21	1.19

The guidance counselors tend to agree with what the students plan to do after high school. Counselors have also informed us that throughout the entire student body, that there 1-5% of the students that would benefit from ESL classes.

Sutton High School

A total of 88 seniors took the survey. 96.59% of those students planned to attend college after graduation from high school. The guidance counselors agree that a very high number of students will attend college after high school. 95.29% said they plan to go full time. 88.24% of the students plan to attend day classes, while 11.76% said they were unsure at this time.

Amongst the college-bound students, 89.24% plan to attend a 4-year college. Guidance counselors disagree slightly with this because they stated that they believe 61-80% of their students would attend a 4-year school. A total of 9.41% of students said they would attend a 2-year school, whether it is for a degree or to transfer eventually. Also, 1.18% of students said they would attend a Technical/Vocational School. The guidance counselors opinions differ from the students because they believe 21-40% of students would attend a 2-year college for a degree, and they believe 0% would attend a 2-year college to transfer.

Students were also asked what they thought their living arrangements might be for college. 89.29% plan to live at school, while the rest plan to commute from home. Only one person did not respond to this question. All these students plan to stay in the confines of the United States. 63.53% plan to go somewhere in New England, and 24.71% would stay only within Massachusetts. 10.59% want to go outside New England. Lastly, only 7.06% want to stay within Worcester County. The guidance counselors' opinions are close but slightly off. The counselors believed the highest percentage of students would stay within Mass, when in reality it was the 2nd highest. Also, they believed the smallest percentage would go outside New England, yet the smallest group was actually the ones who wanted to stay in Worcester County.

In Table 24, the popularity of multiple major fields is shown. The guidance counselor assessment of student interest in areas of study was somewhat correct. Health careers and Education were both expected to be high up, but Business and Human Services were expected by the counselors to be much higher than they are in the table.

If a reasonably priced, accredited school was opened within 20-30 min of the students, 61.18% of the students would consider attending. In Table 25, the factors that would influence a student's decision to attend the aforementioned

Table 24	
I'm not certain	18.82%
Other	17.65%
Education	16.47%
Health Careers	16.47%
Liberal Arts	16.47%
Arts	11.76%
Business	10.59%
Engineering	7.06%
Environmental Studies	7.06%
Human Services	7.06%
Criminal Justice/Law	4.71%
Computers/IT	2.35%
Technical/Automotive...etc	2.35%
Restaurant Management	1.18%
Manufacturing	0.00%

school are listed and their responses are recorded. 75.31% of students plan to attend a school in which they would need financial aid or scholarships, and 4.71% of the students who filled out the survey did not respond to this question.

On a scale of 1-6, students were asked to indicate the most important factors when choosing a college. Among the students, the highest rated factors included choice of majors, cost to attend, campus facilities, and academic reputation. The counselors were given fewer options, but their top two choices for what they thought students took into account match what the students answered. Below, Table 26 shows the mean concerns of students when making a decision about a college, including the standard deviation of the surveyed information. Some of the other factors students mentioned included student atmosphere and study abroad programs.

When asked to list their top three schools, local private colleges ranked first with 38.05% of the schools listed. National state schools followed up with 21.24%. Also, 17.70% of schools listed were local state schools, with the same percentage for national private. 3.54% of the schools listed were Community Colleges. These results reiterate the fact that campus facilities are high on the list for students' considerations when choosing a school. Also, with national state schools being so close in second, academic reputation is shown to be a large consideration as well.

Overall, the guidance counselors agree with the concerns for students but disagree with the amount of students going to college. Counselors have also informed us that throughout the entire student body, that there 1-5% of the students that would benefit from ESL classes.

Table 25	
Courses	73.08%
Transportation	42.31%
Prospect of Employment	25.00%
Close to my job	23.08%
Family Issues	19.23%
Parking Availability	9.62%
Other	3.85%

Table 26		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Choice of majors	5.06	1.06
Academic Reputation	4.67	1.14
Campus Facilities	4.56	1.06
Cost to attend	4.49	1.35
Location of campus	4.22	1.23
Residence Halls	3.93	1.24
Extra-curricular	3.68	1.47
Sports/Athletics	3.11	1.81
Commuting distance	2.75	1.60
Friends/Family attending	2.18	1.28

Uxbridge High School

A total of 71 seniors took the survey. 91.55% of those students planned to attend college after graduation from high school. According to the guidance counselors, this number is accurate. 92.06% of those who responded to this question, plan to go full time, but 3.08% of the students did not respond. 83.08% of the students plan to attend day classes, and 16.92% were unsure at this time. 95.31% of the students that responded, plan to attend a 4-year college. 3.13% plan to go to a 2-year college and transfer, and 3.13% plan to attend a trade/vocational school. These results agree with those of the guidance counselors.

Of the students who responded, 80% plan to live at school, while 7.69% plan to commute. 12.31% of students did not respond to this question. All students plan to attend college within the United States. 58.46% plan to stay within New England. 26.15% would stay only within Massachusetts. 12.31% want to go outside New England. Lastly, 7.69% want to stay within Worcester County. According to the guidance counselors, most of the students plan to stay within Worcester County, and very few would venture outside of New England.

Table 27	
Business	21.54%
Arts	16.92%
Education	16.92%
Health Careers	15.38%
Criminal Justice	12.31%
Liberal Arts	12.31%
Engineering	9.23%
Hospitality	4.62%
Human Services	4.62%
Not Certain	4.62%
Computer/IT	3.08%
Manufacturing	3.08%
Environmental Studies	1.54%
Tech/Auto/Mech	1.54%

In Table 27, the popularity of multiple areas of study is shown. The guidance counselor assessment of student interest in areas of study was very accurate due to the fact that both parties agree on the top favorite fields of study, being business, education, and health careers. Art was not one of the choices in the guidance counselor survey.

If a reasonably priced, accredited school was opened within 20-30 min of the students, 75% of the students would consider attending, but 1.54% gave no response. In Table 28, the factors that would influence a student's decision to attend the aforementioned school are listed and their responses are recorded.

Table 28	
Courses	49.23%
Transportation	29.23%
Close to my job	18.46%
Prospect of employment	18.46%
Family Issues	9.23%
Parking availability	4.62%

According to guidance counselors, only 1-5% of students would benefit from some type of ESL classes.

Students were asked to rate from 1 to 6 multiple factors that would influence their decision to attend a college. The mean and standard deviation for each factor is shown in Table 29. According to it, the choice of majors is the most important factor in making a decision.

Table 29		
<u>Concerns</u>	<u>Mean</u>	<u>Std Dev</u>
Choice of majors	5.31	2.56
Campus Facilities	4.56	1.57
Academic Reputation	4.47	1.51
Cost to attend	4.45	1.81
Residence Halls	4.24	1.86
Location of campus	4.14	1.79
Extra-curricular	3.84	1.63
Sports/Athletics	3.38	1.63
Commuting distance	3.1	1.82
Friends/Family attending	2.61	1.65

The least important factor is whether friends or family are attending. The counselors were given fewer options, but their top two choices for what they thought students took into account were choice of majors and location. Both the students and counselors seem to agree on what is important when choosing a college. The most popular type of schools was a local state school, 75.38% of the students would like to attend, followed

by a nationally rated state college at 66.15%. Only 7.69% of the students would choose to attend a community college and 6.15% would attend a trade/vocational school. Around 62% of the students would like to attend a private college, national or local.

High Schools Total

These observations are based on a comparison of a survey sent to high school students in the Blackstone Valley area (N=1102*) and another sent to guidance counselors in the Blackstone Valley area (N=9).

960 students (87.11%) planned to attend college after high school; the largest number of guidance counselors (7/9) responded that 76% to 100% of students plan to attend college after high school. Guidance counselors (9/9) and student (89.47%) responses indicate that students most often attend college full-time. The majority of students (77.71%) said that they would take classes during the day, while 5.63% would take classes in the evening. 5.63% of students were not sure at the time.

Guidance counselor surveys suggest that fewer students attend a four year college and more attend a two year college than student responses would suggest. The majority of students (85.63%) indicated that they plan to attend a four year college. However, guidance counselors replied that 53% to 73% of students plan to attend a four year college. 6.88% of students planned

Table 30	
Health Careers	21.98%
Business	17.29%
Engineering	12.50%
Art	12.08%
Education	11.15%
Liberal Art	10.52%
Criminal Justice	10.42%
Not Certain	10.21%
Other	10.00%
Computers/IT	5.83%
Tech/Auto/Mech	3.96%
Environmental	3.54%
Human Service	2.60%
Hospitality	2.29%
Manufacturing	1.25%

to attend a two year college to transfer and 4.06% planned to attend a two year college to earn a degree. Guidance counselors indicated that 1% to 20% of students plan to attend a two year college to transfer and 29.4% to 36% of students plan to attend a two year college. Guidance counselors said that only 1% to 20% of students would attend a trade/vocational school, and 4.27% of students said they would attend a trade/vacation school. Most students (78.21%) indicated that they would rather live at school than commute.

50.94% of the students would attend a college in New England, 28.44% would attend a school in Massachusetts, 17.08% would go outside New England, and 6.04% would choose to stay in Worcester County. According to the guidance counselors, most students would attend a college in Massachusetts, followed by Worcester County, New England and outside of New England.

The largest number of students indicated that they would major in Health Careers, Business, Engineering and Art as shown in Table 30. 10.21% of students were undecided and 10.00% wanted to study something other than the areas of study listed below, the most common one being psychology, followed by biology and math. Guidance counselors indicated the same areas of study to be the most popular amongst students.

All the guidance counselors specified that only 1% to 5% of their students would benefit from basic ESL classes. 27.58% of students plan to attend a college they can afford without financial aid.

Students were asked to rate from 1 to 6 multiple factors that would influence their decision to attend a college. The mean and standard deviation for each factor is shown in Table 31. According to it, the choice of majors is the most important factor in making a decision, followed by the school's academic reputation and cost to attend. The least important factor is whether friends or family are attending.

Table 31		
Concerns	Mean	Std Dev
Majors	5.25	2.47
Academic Reputation	4.56	1.66
Cost	4.5	1.85
Campus Facilities	4.49	1.67
Location	4.37	1.73
Residence Halls	3.97	1.71
Extra-curricular	3.61	1.72
Commuting distance	3.35	1.82
Sports/Athletics	3.09	1.79
Friends/Family	2.51	1.65

The most important factor, as evaluated by the guidance counselors, is the choice of majors, followed by the cost to attend. Guidance counselors were given fewer choices than students, but they agree on the most important factors influencing the graduates when selecting a college.

When asked to list their top three schools, local state schools were most represented at 24.08%. Following close behind were local private schools at 23.79%. 22.33% of schools listed were nationally ranked state schools and 20.54% were nationally ranked private. Also, only 5.03% of schools listed were community colleges. Using these results, we can see that most students are looking for a cheap school and one with a wide variety of majors.

Table 32	
Courses	62.78%
Transportation	47.81%
Close to Job	25.42%
Prospect of Employment	18.61%
Family issues	18.00%
Parking	16.64%
Other	4.54%

If a reasonably priced, accredited school was opened within 20-30 min of the students, 68.85% of the students would consider attending. In Table 32, the factors that would influence a student's decision to attend the aforementioned school are listed and their responses are recorded. The most important factor is the courses offered at the school, followed by the availability of transportation.

Guidance counselors have agreed with most of the students' responses, but there were some discrepancies. Many of these disagreements come from the different thought processes between filling out the guidance counselor survey and the student survey. The student survey is completed with the idea of what the student wants to do after high school. The guidance counselor survey is filled out with the guidance counselors knowledge of students' grades and records, along with the knowledge of how difficult it is to get accepted to a college. Guidance counselors balance the visions of the students when filling out the survey with judgements based on real facts.

**Northbridge High School: Student and guidance counselor surveys were unable to be collected at this particular school and therefore do not have their own section in the Data Analysis. Also, their students are not included in the overall total of students in the Blackstone Valley area.*

Business Employers

A total of 16 employers in the Blackstone Valley area responded to the survey. Of these businesses, 56.25% of them consider the scope of their business to be statewide, 12.5% say the scope is only countywide, while another 12.5% say the scope reaches the national level. However, only 6.25% of the responders claimed to have an international business.

Each business was asked the most common educational background that contains at least 20% of their employees. The most common educational backgrounds in these businesses are a high school level/GED at 37.5%, followed by a Bachelor's degree at 29.17%, and Associates degree at 20.83%.

Table 33 shows the primary industry in which each business that responded to the survey is a part of.

Financial	25.00%
Health Care	12.50%
Advertising	6.25%
Association/Non-profit	6.25%
Education	6.25%
IT	6.25%
Insurance	6.25%
Legal Services	6.25%
Manufacturing	6.25%
Publishing/Printing	6.25%
Retail	6.25%
Service	6.25%

Figure 1 shows the distribution of the different employment levels within each company. Most businesses in the Blackstone Valley area contain less than 10 full time employees.

Table 34 shows the most frequent job openings of the businesses in the area. The most frequent job opening in the area is a teller.

teller	25.00%
sales	12.50%
teacher	12.50%
legal assistant	6.25%
food service	6.25%
customer service	6.25%
home caregiver	6.25%
machinist	6.25%
office manager	6.25%
n/a-steady positions	12.50%

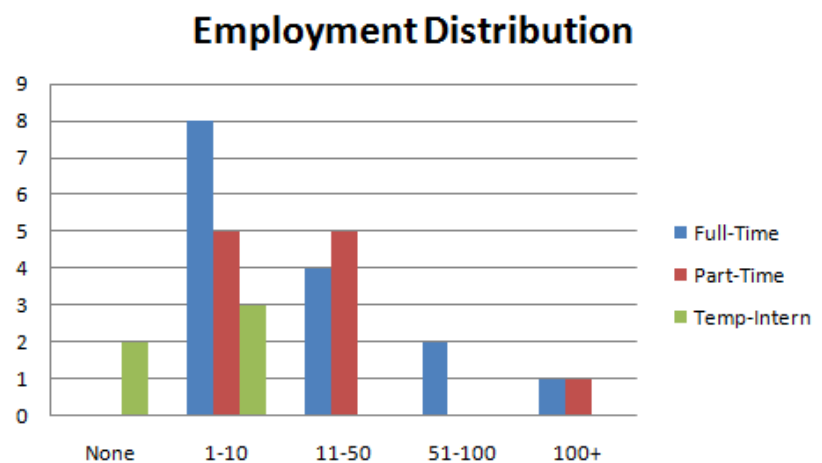


Figure 1

The companies were also asked why each of these positions was frequently open. 37.5% responded that it was due to the position being low level, and there was an opportunity for

upward movement. 18.75% responded that it was due to business growth, and the need for those positions increased. The rest of the reasons each were only mentioned once and they ranged from the work being too difficult to an employee wanting more benefits and the company letting him/her go.

Table 35 shows what the employers believe would be the most beneficial skill training if offered to their employees. General skills include team building, problem solving, basic grammar/spelling/math, etc.

Employers were also asked what type of degree or certificate they would like their employees to have in order for continued success. The top answer was a Bachelor's degree at 27.78%, followed closely by Microsoft Office Training at 22.22%. The other three were an Associate's degree, Master's Degree, and a business degree. They all tied at 16.67%.

Table 35	
Management Skills	25.64%
General Skills	23.08%
Computer Skills	20.51%
Business Skills	17.95%
Other	7.69%
Technical Skills	2.56%
Environmental Skills	2.56%

81.25% of employers said that they would be willing to provide additional training opportunities for employees to improve work performance. 34.29% said they would use In-House training. 25.71% said they would use a private training academy. However, only 2.86% said they would utilize a Community College for training resources. 63.16% of employers said they would use company resources to pay for the training. 26.32% said they would use tuition reimbursement.

The most convenient days of the week to attend classes were Tuesdays, Wednesdays, and Thursdays. Tuesdays and Thursdays were the top two, and we believe the reason for this is that many night classes run on this particular two day schedule. The best time of day for employees to attend classes/training sessions is 1pm-5pm at 43.75% and after 5pm at 31.25%. When asked for the best location to attend training, 31.25% stated that a company sited is the best option, while college campuses, other local sites, and web based training were all tied at 18.75%.

Adult Population

A total of 79 people over the age of 18 in the Blackstone Valley responded to the online adult survey. 97.47% of the people that responded said that they would consider taking classes at a higher educational facility. 44.16% of the adults considering taking higher education classes would attend to complete a degree that they have already started. 95.35% of people who do not intend to complete a degree would take classes for personal enrichment or to learn new skills.

Most of the people who were willing to take classes are available for evening classes. The classes most desired by the general population are computer technology and information

Table 36	
Computers/IT	44.16%
Business	41.56%
Education	32.47%
Health Careers	27.27%
Arts	24.68%
Human Services	15.58%
Liberal Arts	12.99%
Other	11.69%
Technical/Automotive/Elec/etc	10.39%
Environmental Study	6.49%
Hospitality/Restaurant Management	5.19%
Criminal Justice	2.60%
Engineering	2.60%
ESL	2.60%
Manufacturing	2.60%

technology. According to the surveys, 51.16% of people who are not going back to school to finish a degree would like to go back for career advancement. This coordinates with computer and information technology and business being the highest two choices for courses, according to Table 36. Many companies are now looking for people with business and computer skills, so these two types of courses would be the most beneficial for the adults in the area. People going to take classes for personal enrichment correlates with the fact that 36.71% of people who took the survey have bachelor's degrees and 20.25% of people have master's degrees. The people with degrees have no need to get another degree, may like to learn new skills that they may have not learned in college.

On a scale of 1 to 4, adults were asked to rate the most important factors that would influence their decision to choose a college. Table 37 displays those results. Cost of attendance seems to be the most important factor for choosing a college, due to that fact that most adults in the Blackstone Valley are family oriented. The two highest age groups, of the survey takers, are 36-45 years old at 25.32% and 46-55 years old at 32.19%, which is generally the age of parents that could still have kids living at home. The

Table 37		
<u>Influences</u>	<u>Mean</u>	<u>Std Dev</u>
Cost to attend	3.49	0.85
Commuting distance	3.48	0.68
Location of Campus	3.21	0.96
Choice of majors	3.06	1.01
Academic Reputation	3.05	0.91
Campus Facilities	2.78	0.85
Availability of Public Transit	1.81	1.13

residents need time and money for their family, which also explains why commuting distance is such a big deal.

Ample parking is another big factor in people's choices in school, as indicated by Table 38. This statistic also agrees with the idea of people being family oriented. If any Blackstone Valley adults go to school, it will most likely not be to live at school and everyone will commute to their classes, but if there is no parking, no one will take classes.

Table 38	
Ample Parking	59.74%
On-site advising	25.97%
Supply Shop	25.97%
Computer/printer access	22.08%
None of these	19.48%
Campus Restaurant	9.09%
Campus convenient store	2.60%

Future Work

Our surveys were used in the Blackstone Valley with enough results to reach a conclusion on the level of interest for a higher education facility for the region. The results will be taken and reviewed by Blackstone Valley Chamber of Commerce and Quinsigamond Community College. The Chamber is comparing our results to other factors that would allow them to make a decision on whether or not to allocate resources to a higher education facility for the expansion into the Blackstone Valley. QCC plans to use the results to determine if a satellite branch in the area is a worthwhile expenditure.

Our project is now part of the foundation for QCC's future research for expansion. They plan to use similar methods to this project to investigate the Marlboro region. Most of our research methods would yield a strong amount of results from Marlboro. For example, our student and guidance counselor surveys both produced a large amount of participation within the Blackstone Valley area. However, only 79 adults and 16 business employers responded to their respective surveys. The method of posting an online survey with a very limited time window did not provide the optimal amount of response. In the future, a larger time window would be necessary to increase responses. Another idea would be to contact the adults and business employers in the area ahead of time through e-mail, parcel post, advertisements, etc. This would yield a much higher response in a shorter time window.

Conclusion

A major challenge among the school districts in the Blackstone Valley area is servicing youth who do not pass MCAS, marginally pass MCAS, are not prepared for college, or have not shown an interest in a career/job.

The main purposes of this project were to gather information to find out if there is demand for a higher education option in the region, and what form that higher education option should take in terms of courses and design of facility. In order to obtain this information, we created four different surveys to be distributed throughout the Blackstone Valley. The student and guidance counselor surveys were distributed through the schools in the area, while the adult and business employer surveys were displayed on multiple web pages for use by a wide audience.

Once the surveys were collected back from the high schools, we began to analyze each school individually before putting all the results together for the whole of Blackstone Valley. Guidance counselor surveys were used as a supplement to the student surveys. We used their surveys to compare their ideas for what the students would do after high school to what the students *want* to do after high school. Also, the adult and business employer surveys results were each recorded in their own excel spreadsheets.

Based on the analysis of our collected data, we believe desire for a higher education facility in the area is existent. The student surveys show that 6.88% of students would like to go to a 2-year college then transfer. Also, 85.63% say they want to go to a four year college, but not all students will get in to their top choices, and realistically, may need to settle on a two-year program before entering a four-year school. In addition, guidance counselor surveys suggest fewer students will attend a four-year college than what the students tell us through their responses, and a higher percentage will attend a two-year school. 21.25% of students would like to commute to college, and a school close to home is always a good choice for commuters. 28.44% of students want to stay within Massachusetts, and 5.03% of all students plan to go to a community college. When asked if students would consider attending an accredited school, 20 to 30 minutes from their home, 68.85% said yes. 23.65% said they would like to attend a school where they do not need financial aid in order to attend.

The adult population of the Blackstone Valley also shows an interest in a higher education facility in the area. Of the 79 people who responded to the survey, 77 (97.47%) said they would take classes for continued education. The reasons for taking classes vary, but the majority can agree that they want a cheap school that has a short commuting distance. Among the businesses in the area, a high school level education is the most common amongst employees. 81.25% of employers stated that they would be willing to provide additional training

opportunities for their employees. A higher education facility in the area would provide the ability to access training for employees.

We believe that approximately 200 students would attend a community college in the area. We have concluded that approximately 76 students in the area are willing to go to a community college. Also, the number of students from Northbridge High School that did not get a chance to respond will add up to that. From our experience in high school, there are many students that will change their mind about community college and will end up attending. There is also an amount of people that are rejected from their desired schools and decide that they need to go to a community college to improve their GPA to attend their dream school. All these factors together create a possibility of 200 students in the coming year that would like a community college close by. Many adults in the area would also attend the local educational facility, increasing the number of attendees, plus the employees that would be sent to the school from the local businesses. All these factors combined create an interest for a satellite community college in the area.

Appendix A: Surveys

Student Survey

We are WPI students working with an educational facility (not WPI), as a group project, to gather survey information to help inform that educational facility in their expansion plans. The following questionnaire will help us gather the information necessary for making an informed decision about the facility. Your participation in this survey is completely voluntary, and you will not incur any penalty of any sort if you do not wish to complete this survey. No personal information will be associated with this survey. If you have any questions or concerns, please call Sean Burke at 508-887-2895.

1. Year of graduation _____ and High School _____

2. I plan to attend college/trade school upon graduation from high school. YES NO

If you answered "No" to question two, you do not need to continue.

Please mark only one answer per question unless otherwise stated. Thank you.

3. After graduation, I plan to attend college A. Full-time B. Part-time

4. At college, I plan to enroll primarily in

Day classes ____ Evening/Weekend classes ____ Unsure at this time ____

5. I plan to enroll in a

4-year College ____

2-year College to transfer ____

2-year College for a degree or certificate ____

Trade/Vocational School ____

Other (explain) _____

6. I plan to

A. Live at school

B. Commute

7. I would prefer to attend college within

Worcester County

New England

Massachusetts

outside NE but in the United States

Other: _____

8. When I enroll in college, I plan to major in (please circle all that apply)

A. Arts

B. Business

C. Computers/Information technologies

D. Criminal Justice/law enforcement

E. Education/teacher preparation

F. Engineering

G. Environmental studies

H. Health careers (nursing, dental, paramedic technology, etc)

I. Hospitality/Restaurant management

J. Human Services

K. Liberal arts

L. Manufacturing

M. Technical/Automotive/Electronics/Mechanical

N. I'm not certain at this time

O. Other _____

9. List 2-3 colleges you might consider attending.

A. _____

B. _____

C. _____

10. Please rate from 1 to 6 the factors that will influence your college choice.

	Least important				Most important	
	1	2	3	4	5	6
Academic reputation	1	2	3	4	5	6
Campus facilities	1	2	3	4	5	6
Choice of majors	1	2	3	4	5	6
Commuting distance	1	2	3	4	5	6
Cost to attend	1	2	3	4	5	6
Extra-curriculars	1	2	3	4	5	6
Friends/ family attending	1	2	3	4	5	6
Location of campus	1	2	3	4	5	6
Residence halls	1	2	3	4	5	6
Sports/athletics	1	2	3	4	5	6

Other important factors _____

11. If a reasonably-priced, accredited college campus was opened within 20 to 30 minutes of your home, would you consider enrolling? YES NO

12. If you answered "yes" to question #11, what issues would influence your decision to choose a campus close to home? (circle all that apply).

A. Transportation

B. Family issues

C. Close to my job

D. Courses I want

E. Prospect of employment

F. Parking availability

G. Other (explain): _____

13. I plan to attend a college I can afford without financial aid or scholarships.

YES

NO

Guidance Counselor Survey

We are WPI students working with an educational facility (not WPI), as a group project, to gather survey information to help inform that educational facility in their expansion plans. The following questionnaire will help us gather the information necessary for making an informed decision about the facility. Your participation in this survey is completely voluntary, and you will not incur any penalty of any sort if you do not wish to complete this survey. No personal information will be associated with this survey. If you have any questions or concerns, please call Sean Burke at 508-887-2895.

1. School Represented: _____
2. What is the size of your graduating class? (circle one)
100 or less 101-200 201-300 301-400 401 or more
3. What percentage of your graduating class plan to attend college? (circle one)
1-25% 26-50% 51-75% 76-100%
4. What percentage of your graduates plan to
 - Attend a four year college?
1-20% 21-40% 41-60% 61-80% 81-100%
 - Attend a two year college only?
1-20% 21-40% 41-60% 61-80% 81-100%
 - Attend a two year college then transfer?
1-20% 21-40% 41-60% 61-80% 81-100%
 - Attend a vocational/technical school?
1-20% 21-40% 41-60% 61-80% 81-100%
 - Not attend college?
1-20% 21-40% 41-60% 61-80% 81-100%
5. Where do your graduates plan to attend college? Please rank from 1 (most graduates) to 4 (fewest graduates).
 - Worcester County ____
 - Outside Worcester County but still in Mass ____
 - Outside of Mass, but still in New England ____
 - Outside of New England ____
6. Of graduates planning to attend college, do they most often attend college: (circle one)

Full Time

Part-time

7. Please rank the following, in order, based on which factor you think influences your graduates most when selecting a college. (5 being the highest, and 1 being the lowest rank)

Athletics ____ Choice of majors ____ Cost to attend ____
Location ____ Student life ____

8. Rate each major according to its popularity among graduates.
(4- very popular / 3- somewhat popular / 2- slightly popular / 1-rarely chosen)

Business	____	Health Care (nursing, dental, etc)	____
Computers/IT	____	Hospitality Management	____
Criminal Justice	____	Human Services	____
Education	____	Liberal Arts	____
Engineering	____		

9. What percentage of your overall student body (not just in the graduating class) would benefit from basic ESL classes? (circle one)

1-5% 6-10% 11-15% 16-20% 20%+

10. If an accredited college campus were to open within 20 minutes of your high school, would students attend?

Yes ____ No ____ Maybe ____

Business and Industry Survey

We are WPI students working with an educational facility (not WPI), as a group project, to gather survey information to help inform that educational facility in their expansion plans. The following questionnaire will help us gather the information necessary for making an informed decision about the facility. Your participation in this survey is completely voluntary, and you will not incur any penalty of any sort if you do not wish to complete this survey. No personal information will be associated with this survey. If you have any questions or concerns, please call Sean Burke at 508-887-2895.

Note: Survey also available for online submission at

<https://spreadsheets.google.com/viewform?formkey=dHBEU0ExN1YydzNVTvFKVI9qRUNGd3c6MQ>

1. What town is your business in? _____

2. How would you classify the scope of your business? Please select one.

International	___	National	___	New England	___
Massachusetts	___	Countywide	___	Town only	___

3. What are your most common educational backgrounds of your employees? (check any selection that contains at least 20% of your employees)

No High School	___	Some High School	___	High School/GED	___
Associates Degree	___	Bachelors Degree	___	Masters Degree	___
Doctorate	___				

4. What is your primary business? Please check one.

Accounting	___	Engineering/Architecture	___	Manufacturing	___
Agriculture	___	Financial	___	Publishing/Printing	___
Advertising	___	Government	___	Restaurants	___
Association/Non-profit	___	Health Care	___	Retail	___
Biotechnology	___	Hotels and Lodging	___	Service	___
Communications	___	IT	___	Skilled Trade	___
Construction	___	Insurance	___	Transportation	___
Education	___	Legal Services	___	Utilities	___
Other (specify): _____					

5. Approximately how many people are employed by your company in each category?

	None	1-10	11-50	51-100	100+
Full-Time	_____	_____	_____	_____	_____
Part-Time	_____	_____	_____	_____	_____
Temp/Intern	_____	_____	_____	_____	_____

6. What is the most frequent job opening? _____

7. Why?

Low Level position/ upward movement	_____	Needs specific education	_____
Employee leaves company entirely	_____	Workers laid-off	_____
Other	_____		

8. What types of skills training would be most beneficial for employees of your company?
(check all at apply)

General Skills (team building, problem solving, basic grammar/spelling/math, etc)	_____
Management and Supervisory Skills (team leadership, employee motivation, etc)	_____
Business Growth Skills (total quality management, statistical process control, etc)	_____
Technical Skills (precision measurement and gauging, machinist training, etc)	_____
Computer Skills (auto CAD, office software, programming languages, etc)	_____
Environmental Skills/Certification (HazMat, HazWoper, fall protection, etc)	_____
Other (please specify):	_____

9. What Degrees or certificates would you like your employees to have for continued success of your business? (specify top 3)

A. _____
B. _____
C. _____

10. Are you interested in providing additional training opportunities to your employees that would help improve job performance? YES NO

If you answered no, please answer only the next two questions. If yes, please complete the survey.

11. What methods of training do you most frequently use? Specify top three.

In-house	___	Department of labor	___
Community college	___	MA Workforce development	___
4-year college/university	___	Internet	___
High school	___	Union	___
Private training academy	___	Professional associations/conferences	___
Other (please specify): _____			

12. What funding resources do you utilize to train your employees? Check all that apply.

The Massachusetts Workforce Training Fund	___
Tuition Reimbursement	___
The company's training resources	___
Other	___

13. What days of the week are best for your employees to attend class? Check all that apply.

Monday	___	Friday	___
Tuesday	___	Saturday	___
Wednesday	___	Sunday	___
Thursday	___		

14. What are the best times of day for your employees to attend class? Choose best two.

Anytime	___	Before 9:00 AM	___	9:00AM – noon	___
Lunchtime	___	1:00PM-5:00PM	___	After 5:00PM	___

15. At which location would you prefer your employees to attend training classes? Select one.

Company site	___	College Campus (within 20 min)	___
Another local site	___	On-site web-based training	___

Adult Population Survey

We are WPI students working with an educational facility (not WPI), as a group project, to gather survey information to help inform that educational facility in their expansion plans. The following questionnaire will help us gather the information necessary for making an informed decision about the facility. Your participation in this survey is completely voluntary, and you will not incur any penalty of any sort if you do not wish to complete this survey. No personal information will be associated with this survey. If you have any questions or concerns, please call Sean Burke at 508-887-2895.

Note: Survey also available online at

<https://spreadsheets.google.com/viewform?formkey=dE5qVGJhRklVTjZkNTZodGdzbzJGNWc6MQ>

1. Town you live in _____
2. If a reasonably priced, accredited college campus was opened within 20 to 30 minutes of your home, would you consider taking classes? YES NO

If you answered "No" to question two, please skip ahead and only answer 8 and 9.
If "Yes", please mark only one answer per question unless otherwise stated. Thank you.

3. What would be your primary reason for taking courses at the college?
 - a. I would complete a degree. YES NO
 - b. Another incentive (please rank from 1 to 4)
Completing an unfinished degree ____
Required by your employer ____
Career advancement ____
Learn new skills/Personal Enrichment ____
Other (please specify): _____
4. When would you be available to take classes? (check all the apply)
Day ____ Evening ____ Weekends ____ Online ____
5. What types of courses would you be interested taking? (check all that apply)

Arts	_____	English as a Second Language	_____
Business	_____	Health Careers (nursing, dental, etc)	_____
Computers/IT	_____	Hospitality/Restaurant Management	_____
Criminal Justice	_____	Human Services	_____
Education	_____	Liberal Arts	_____
Engineering	_____	Manufacturing	_____
Environmental Study	_____	Technical/Automotive/Electronic/etc	_____
Other : _____			

6. Please indicate the importance of the factors below that might influence your college choice?

LEAST IMPORTANT → MOST IMPORTANT

Academic reputation	1	2	3	4	5	6
Campus facilities	1	2	3	4	5	6
Choice of majors	1	2	3	4	5	6
Commuting distance	1	2	3	4	5	6
Cost to attend	1	2	3	4	5	6
Location of campus	1	2	3	4	5	6
Availability of Public Transportation	1	2	3	4	5	6

Other important factors: _____

7. All other things being equal, what amenities would influence your decision to choose one campus over another? (check all that apply)

Campus restaurant	___	Supply Shop (books, etc)	___
On-site advising	___	Computer/printer access	___
Ample Parking	___	Campus convenient store	___
		None of these	___

8. Please give us your age range.

18-25 26-35 36-45 46-55 56-65 65+

9. What is the highest level of education you have completed?

No high school	___	Associates Degree	___
Some High School	___	Bachelors Degree	___
HS Diploma/GED	___	Masters Degree	___
Some College	___	Doctorate	___